

### DEPARTMENT OF ENVIRONMENTAL PROTECTION

Gina McCarthy, Commissioner

# 2006 MUNICIPAL INLAND WETLAND COMMISSIONERS TRAINING PROGRAM

**SEGMENT I** 

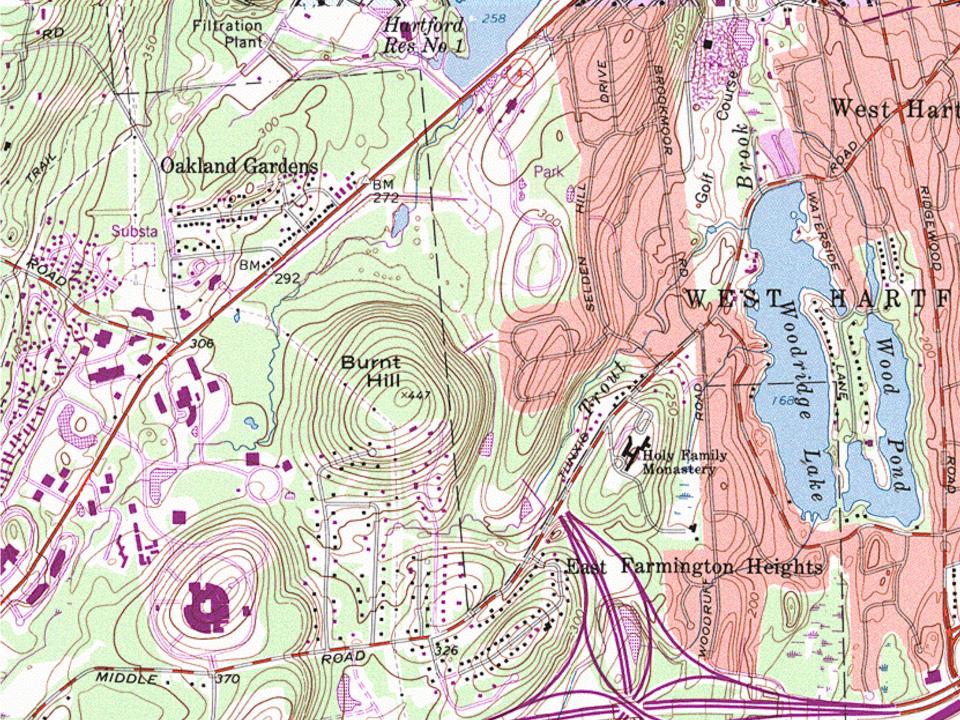
CONNECTICUT'S INLAND WETLANDS AND WATERCOURSES: AN INTRODUCTION TO PRINCIPLES AND PRACTICES

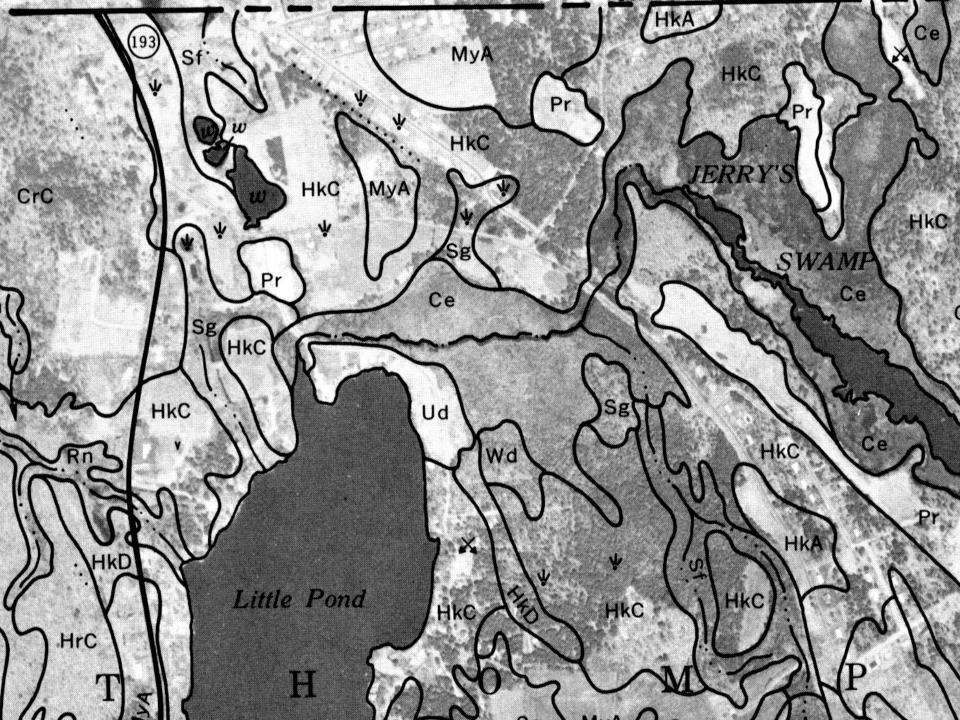
SITE PLAN REVIEW, MAPS AND WATERSHEDS

A <u>MAP</u> IS A REPRESENTATION OF THE EARTH'S SURFACE, OR SOME PORTION OF IT, SHOWING THE RELATIVE PARTS REPRESENTED USUALLY ON A FLAT SURFACE.

#### TYPES OF MAPS COMMONLY USED IN WETLANDS REGULATION:

- NRCS SOIL SURVEY MAPS
- DEPT. OF INTERIOR NATIONAL WETLANDS INVENTORY MAP
- DEP NATURAL DRAINAGE BASINS IN CONNECTICUT MAP
- DEP WATER QUALITY CLASSIFICATIONS MAP OF CONNECTICUT
- AERIAL PHOTOGRAPHS (NOT MAPS, BUT VERY USEFUL)
- SITE PLANS, DRAWINGS OR SKETCHES



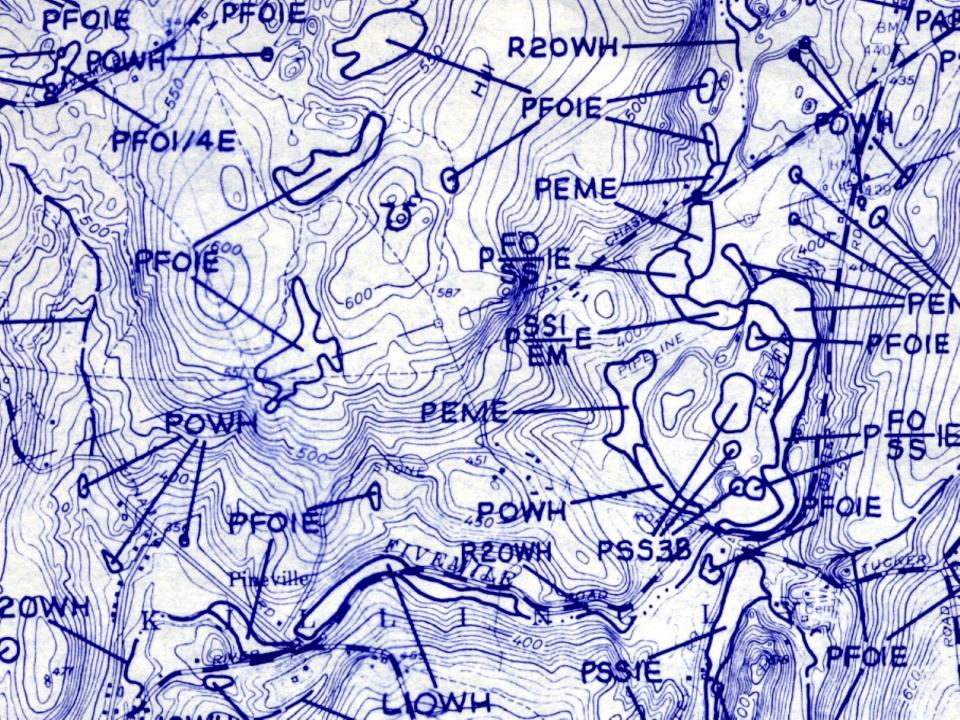




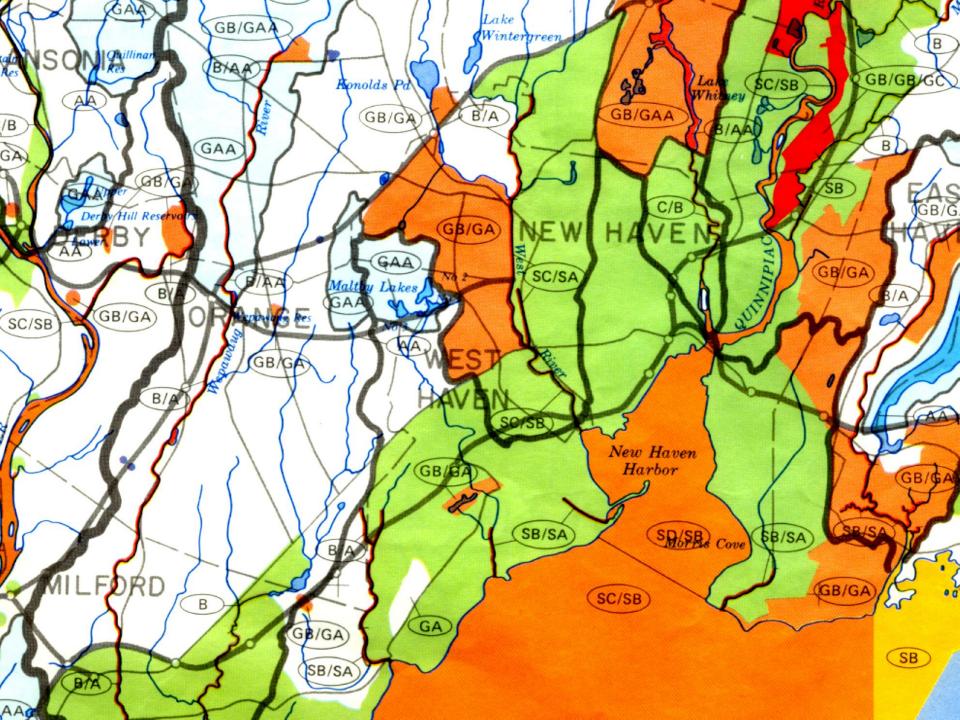
#### **WEB SOIL SURVEY 1.1**

http://websoilsurvey.nrcs.usda.gov/

- This Web site allows online viewing of soil survey maps and reports.
- The site utilizes the most recent, modern soil survey information.
- The new soil survey information unifies the separate eight county soil legends into a single statewide legend.
- Copies of the published county soil survey reports dated prior to July 2005 are no longer the official soil survey information and should only be used as historical reference.









# A <u>SITE PLAN</u> IS A MAP OF A PORTION OF LAND DEPICTING EXISTING SITE CONDITIONS AND PROPOSED DEVELOPMENT ACTIVITIES, DRAWN TO SCALE.

- A SITE PLAN IS USUALLY DEVELOPED BY BOTH A LICENSED LAND SURVEYOR AND A PROFESSIONAL ENGINEER.
- THE LICENSED LAND SURVEYOR WILL DETERMINE THE SITE TOPOGRAPHY (OR LAND CONTOURS), EXISTING LANDSCAPE FEATURES, PROPERTY BOUNDARIES, AND FIELD LOCATE INLAND WETLAND LIMITS FLAGGED BY A SOIL SCIENTIST.

#### A LAND SURVEYOR USES THE FOLLOWING METHODOLOGIES:

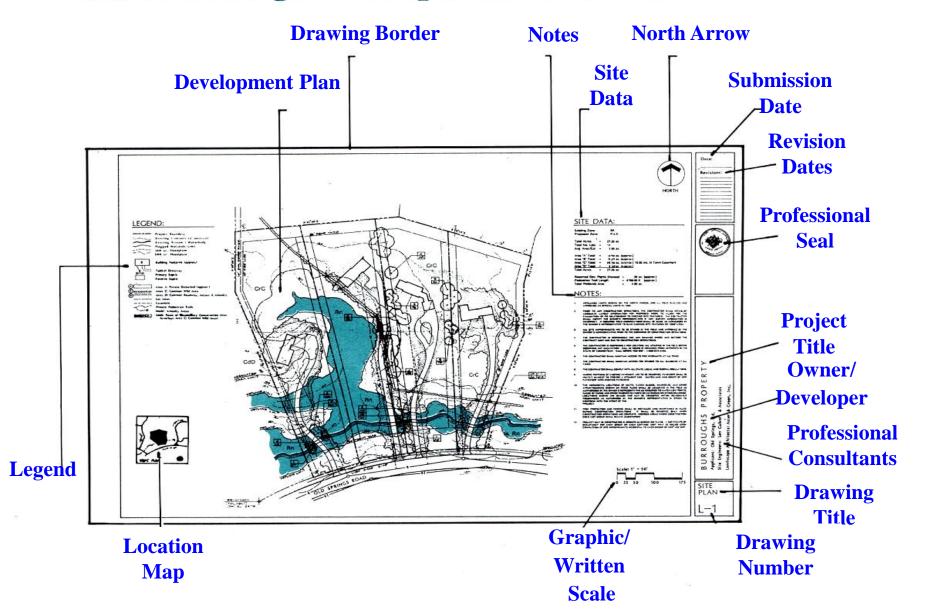
- AERIAL PHOTOGRAMMETRY THIS METHOD IS GENERALLY USED TO SURVEY LARGE TRACTS OF LAND AND IS PERFORMED USING AERIAL PHOTOGRAPHS OF THE SITE, A COMPUTER SURVEY PROGRAM, AND ESTABLISHED REFERENCE LAND ELEVATIONS.
- FIELD SURVEYING INDIVIDUALS ON THE GROUND USING LEVELS, TRANSITS, RODS, ELECTRONIC DISTANCE METERS, AND GLOBAL POSITIONING SYSTEMS.
- OBTAINING TOPOGRAPHIC MAPS FROM THE MUNICIPALITY-COMPLETED SURVEY MAPS MAY BE AVAILABLE FROM THE TOWN IN PAPER OR DIGITAL FORM.

#### FROM SITE SURVEY TO FINAL SITE PLAN:

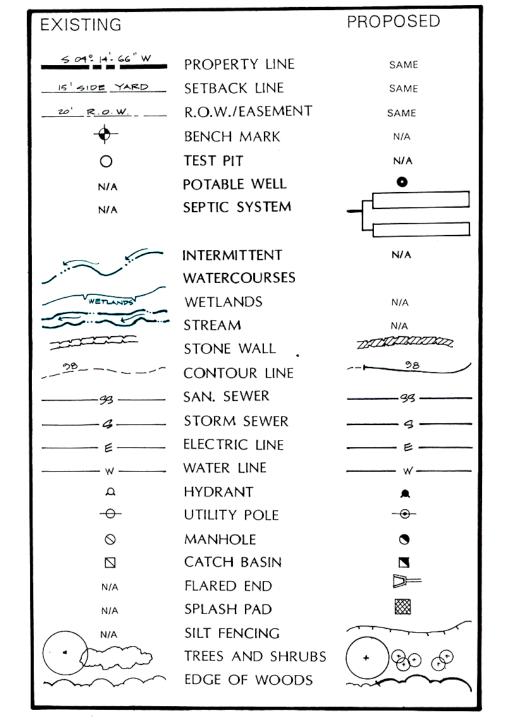
- THE LICENSED LAND SURVEYOR DRAWS A BASE MAP BY HAND OR GENERATES IT USING A COMPUTER AIDED DESIGN PROGRAM.
- THE PROFESSIONAL ENGINEER ADDS LAYERS OF INFORMATION TO THE BASE MAP (e.g. PROPOSED TOPOGRAPHY).
- THE PROFESSIONAL ENGINEER MAY ADD OTHER PROJECT INFORMATION (e.g. EROSION AND SEDIMENT CONTROLS).
- BOTH THE LICENSED LAND SURVEYOR AND PROFESSIONAL ENGINEER SHOULD STAMP (OR SEAL) THE SITE PLANS.
- THE SOIL SCIENTIST THAT DELINEATED THE INLAND WETLANDS MAY REVIEW THE DEPICTED LIMITS OF THE WETLANDS FOR ACCURACY AND SIGN THE SITE PLANS.

### Reviewing a Site Plan

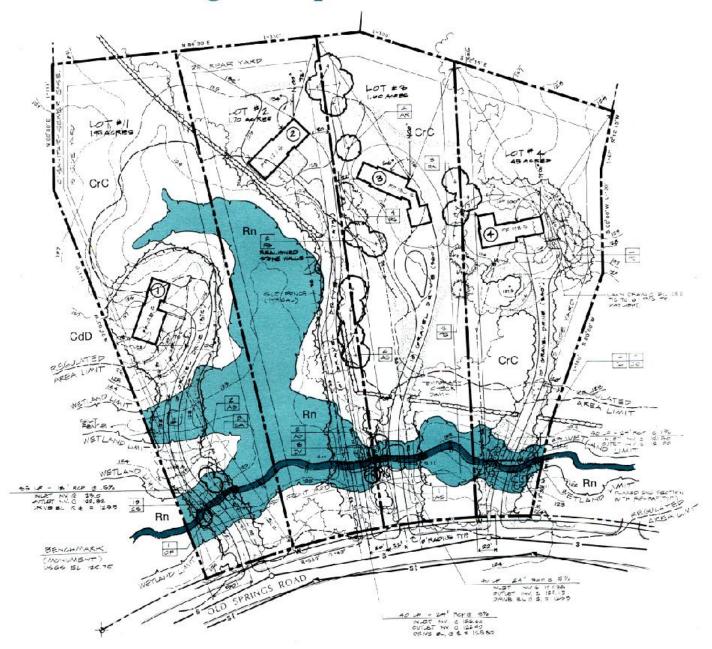
#### Understanding the Components of a Plan



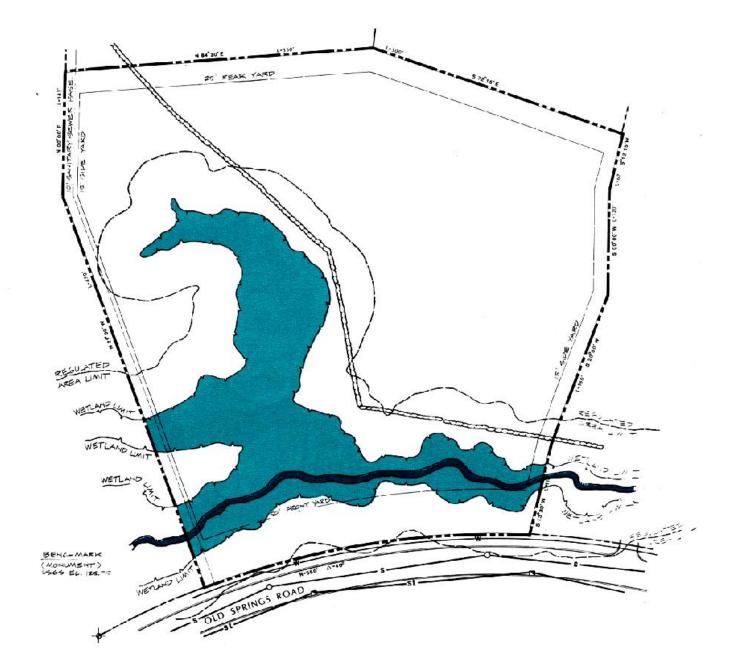
#### Map Legend



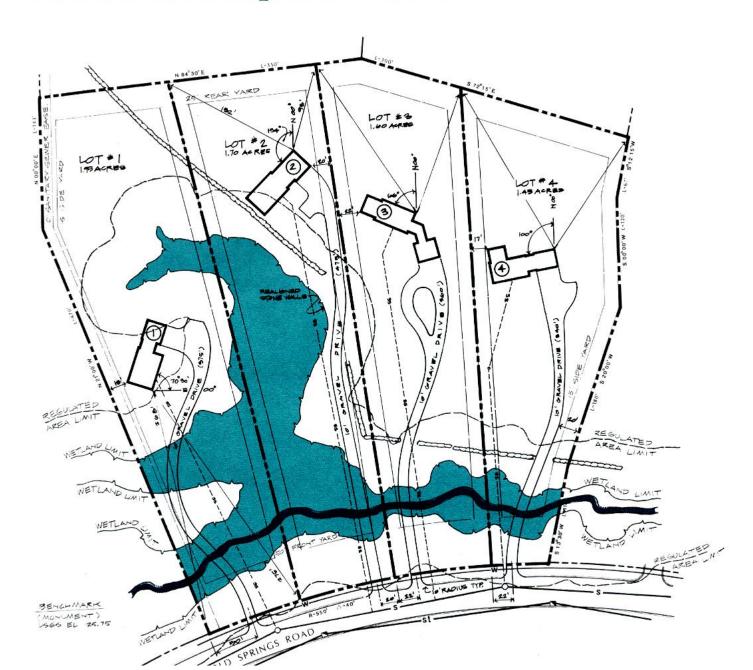
#### **Understanding the Graphics**



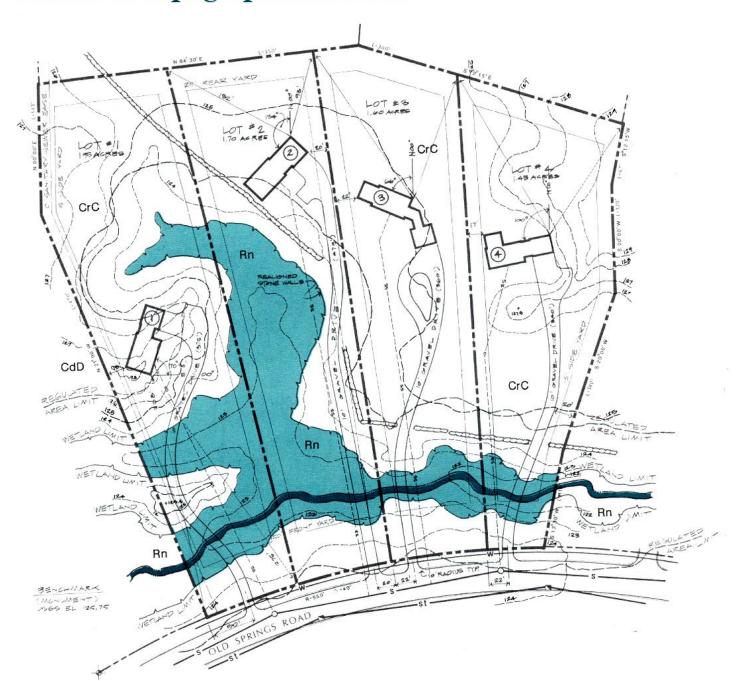
#### **EXISTING Site Features**



#### **PROPOSED Development Features**



#### **EXISTING Topographic Features**



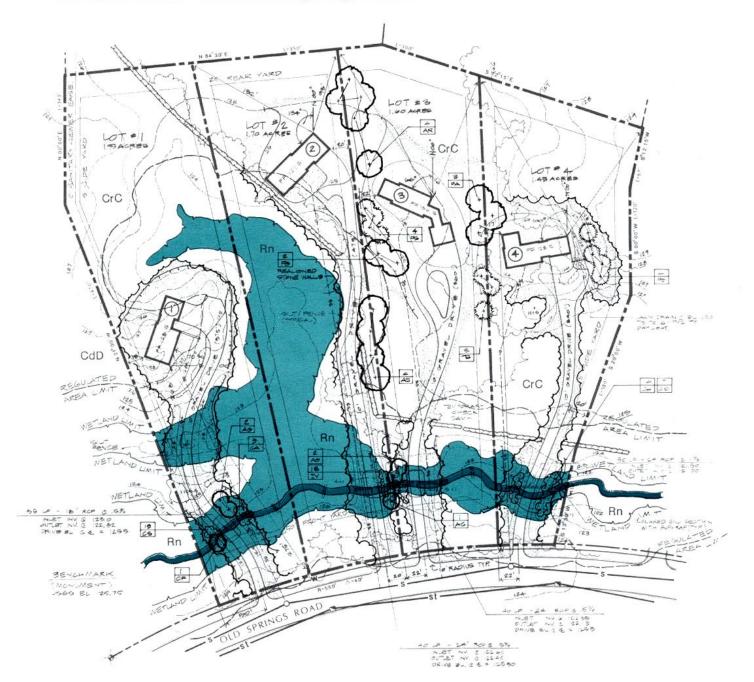
#### **PROPOSED Grading**



#### **EXISTING Vegetation**

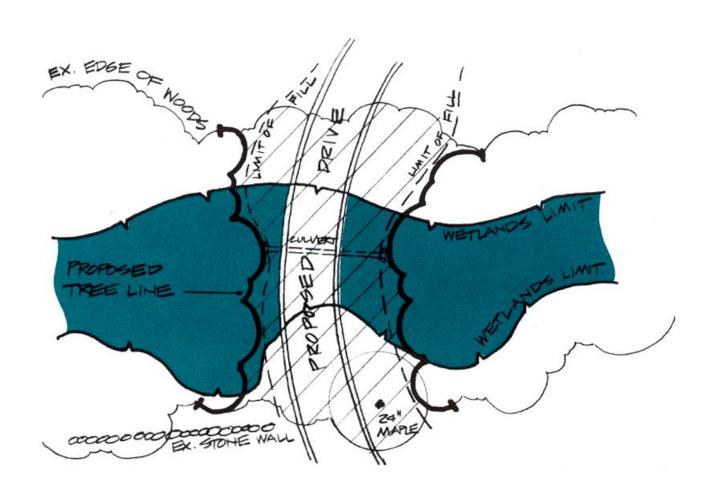


#### **PROPOSED Landscaping Plan**

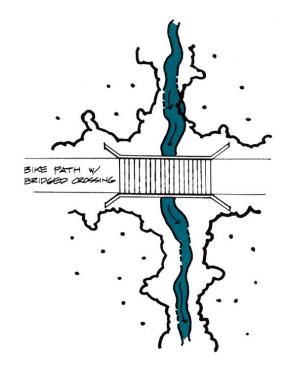


# Identifying Potential Regulated Activities and Impacts

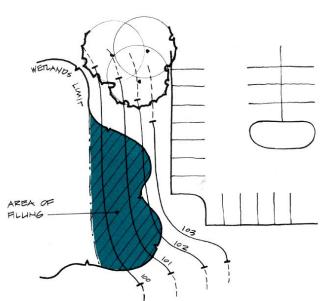
■ Clearcutting/Grubbing

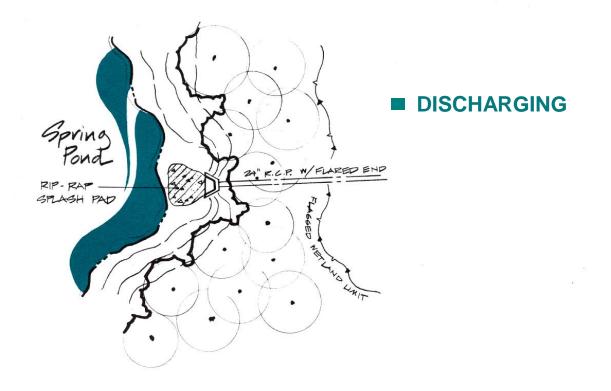


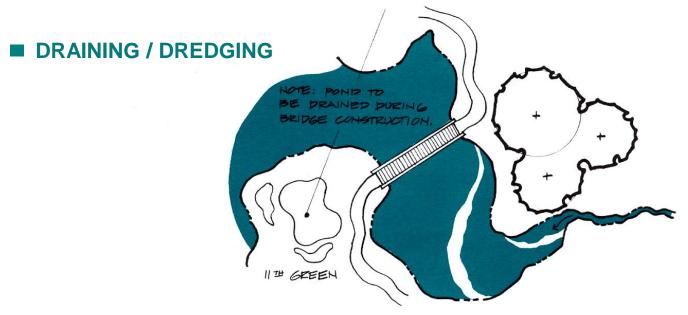
#### **■ CROSSINGS**

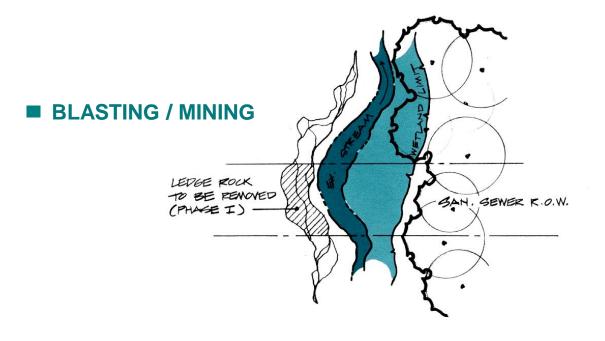


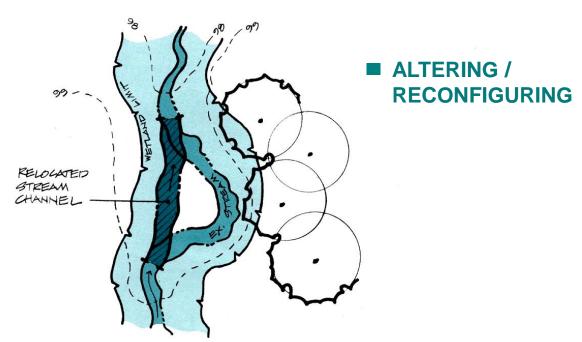
## ■ EXCAVATING / FILLING



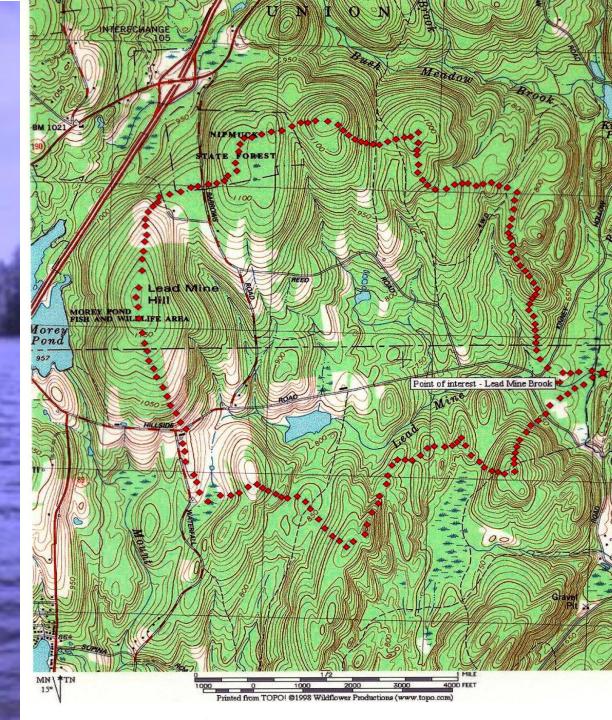








A WATERSHED OR **DRAINAGE BASIN** IS AN AREA OF **LAND IN WHICH ALL THE WATER** THAT FALLS ON THE LAND AREA **EVENTUALLY DRAINS TO THE** SAME OUTLET.



IN 1996 THE DEP WATERSHED MANAGEMENT AND COORDINATION PROGRAM WAS ESTABLISHED TO ADDRESS THE FOLLOWING STATEWIDE ENVIRONMENTAL ISSUES:

- NONPOINT SOURCE POLLUTION CONTROL
- CUMULATIVE IMPACTS OF POINT SOURCE POLLUTION
- RESTORATION OF DEGRADED HABITAT
- PROTECTION OF NATURAL RESOURCES

## DEP HAS ORGANIZED THE STATE INTO FIVE MAJOR RIVER BASIN OVERVIEW AREAS:

- THE WESTERN COASTAL RIVER BASIN
- HOUSATONIC RIVER BASIN
- CENTRAL COASTAL RIVER BASIN
- CONNECTICUT RIVER BASIN
- THAMES RIVERS BASIN

DEP HAS ASSIGNED WATERSHED MANAGEMENT COORDINATORS FOR EACH BASIN.

## MUNICIPAL INLAND WETLAND AGENCIES PRACTICE WATERSHED MANAGEMENT WITH:

- DECISIONS TO ISSUE OR DENY PERMITS
- CONDITIONS PLACED ON PERMITTED ACTIVITIES
- ACTIONS TAKEN TO ENFORCE WETLAND LAWS AND PERMITS
- REGULATION OF ACTIVITIES IN UPLAND REVIEW AREAS

THE PROTECTION OF WETLAND FUNCTIONS AND VALUES IS A CRITICAL COMPONENT OF WATERSHED MANAGEMENT.